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08/978,753 11/26/97 MARKOVIC

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EXAMINER

TM02/0329

ROGER S BOROVVOY
FISH & RICHARDSON
2200 SAND HILL ROAD
SUITE 100
MENLO PARK CA 94025

PAULA, C

ART UNIT

PAPER NUMBER

2176

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/978,753

Applicant(s)

MARKOVIC ET AL.

Examiner

CESAR B PAULA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 28 December 2000 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: /

DETAILED ACTION

1. This action is responsive to the amendment, and formal drawings filed on 12/28/2000, and 1/10/2001.

This action is made non-final.

2. In the amendment, claim 47 has been added. Claims 1-47 are pending in the case. Claims 1, 23-24, 27, 38-40, and 46-47 are independent claims.

3. The rejection of claims 1-4, 12-28, 30-35, 37-40, and 42-45 under 35 U.S.C. 103(a) as being unpatentable over Tabata et al (Pat. # 5,774,232, 6/30/1998, filed on 9/21/1995) in view of Miller et al (Pat. # 5,696,605, 12/9/1997, filed on 11/20/1992) have been withdrawn as necessitated by the newly found prior art.

Drawings

4. The drawings filed on 12/28/2000 have been approved by the draftsman.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al (Pat. # 5,774,232, 6/30/1998, filed on 9/21/1995) in view of Miller et al (Pat. # 5,696,605,

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12/9/1997, filed on 11/20/1992), and further in view of Takakura et al, hereinafter Takakura (Pat. # 5,752,053, 5/12/1998, filed on 5/18/1995).

Regarding independent claim 1, Tabata et al disclose: "...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book....." (Col. 6, lines 18-34). Tabata et al fail to teach: *receiving in a computer a first electronic document*. However, Miller et al disclose: "...U/I 52 interfaces....enabling the operator to program print jobs and other instructions.....Main memory 56 has plural hard disks....for storingscanned image data....." (Col. 4, lines 11-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that this storage of information would have allowed the operator to process the stored document.

Moreover, Tabata et al disclose: "...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book....." (Col. 6, lines 18-34). Tabata et al fail to teach: *receiving in the computer a user input that selects an instruction for assembling a hard copy document*. However, Miller et al disclose: "...U/I 52 interfaces....enabling the operator to program print jobs and other instructions.....Main memory 56 has plural hard disks....for storingscanned image data....." (Col. 4, lines 11-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that this storage of information would have allowed the operator to process the stored document.

Moreover, Tabata et al disclose: *determining in the computer a visual appearance of a first electronic document as if printed and assembled in accordance with the instruction* --“When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al fail to explicitly disclose: *determining in the computer a visual appearance of the first electronic document as if printed and assembled in accordance with the instruction*. However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display of a visual representation—“forms”, and “print binding”-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18), and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Furthermore, Tabata et al disclose: “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al fail to explicitly disclose: *producing as output the determined visual appearance*. However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front

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cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display or output of visual representation—“ forms”, and “print binding”-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18) , and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 2, which depends on claim 1, Tabata et al disclose:-- “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al disclose: “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al fail to explicitly disclose: *generating a second electronic document which depicts the first electronic document and displaying the second electronic document*. However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different

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format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display or output of visual representation—“forms”, and “print binding”-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18) , and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 3, which depends on claim 2, Tabata et al disclose: *receiving a second user input that selects a second instruction.....*-- “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al teach in the previous quote, the selection from a menu of options to instruct the system to display of the appearance of a document as if it was printed-- *a second user input*--, and bind it with a staple.

Regarding claim 4, which depends on claim 2, Tabata et al disclose: -- “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al fail to explicitly disclose: *modifying a copy of the first electronic document to generate the second electronic document*. However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of

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the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of the selection from a menu of options to instruct the system to display of the appearance of a document as if it was printed, and stapling/binding taught by Tabata et al, and the display or output of visual representation—“ forms”, and “print binding”-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18) , and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 5, which depends on claim 4, Tabata et al disclose: “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65).). Tabata et al fail to explicitly disclose: *...modifying the copy of the first electronic document includes adding a tile depicting a change in the visual appearance.* However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of the selection from a menu of options to instruct the system to display of the appearance of a document as if it was printed, and stapling/binding

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taught by Tabata et al, and the display and modification of a document by adding a preformatted tile—" forms"-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18) , and "figure input editing ...can be easily performed by the screen control process" (col. 6, lines 8-11).

Regarding claim 6, which depends on claim 5, Tabata et al disclose: "...When the staple function is selected, the control section 2108 displays a staple position input screen....." (Col. 20, lines 57-65, Fig. 20a). Tabata et al fail to explicitly teach *retrieving the tile from a database*. However, Takakura teaches: "A display pattern called a "form" is added to these three input editing operations" (col. 4, lines 23-31, col. 5, lines 5-26, Fig. 6E-F, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the stapling/binding taught by Tabata et al, and the retrieval of a preformatted tile—" forms"—determining the visual appearance of a document as if printed from a database of forms, as taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18) , and "figure input editing ...can be easily performed by the screen control process" (col. 6, lines 8-11).

Regarding claim 7, which depends on claim 6, Tabata et al disclose: "When the staple function is selected, the control section 2108 displays a staple position input screen....." (Col. 20, lines 57-65, Fig. 20a). Tabata et al fail to explicitly teach *the database includes an entry for each instruction*. However, Takakura teaches: "A display pattern called a "form" is added to these three input editing operations" (col. 4, lines 23-31, col. 5, lines 5-26, Fig. 6E-F, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the

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invention to have combined the stapling/binding taught by Tabata et al, and the retrieval of a preformatted tile—"forms"—determining the visual appearance of a document as if printed from a database using corresponding file name or identifier as was well known in the art at the time of the invention, as taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18), and "figure input editing ...can be easily performed by the screen control process" (col. 6, lines 8-11).

Regarding claim 8, which depends on claim 7, Tabata et al disclose: "image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book" (Col. 6, lines 18-34). Tabata et al fail to teach: *each entry includes a first tile associated with a front page.... a second tile associated with an inside right page...a third tile associated with an inside left page...and a fourth tile associated with a final page.* However, Takakura discloses: "FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page" (col. 5, lines 5-26, col. 4, lines 26-31, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and the graphical tiles taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18).

Regarding claim 9, which depends on claim 8, Tabata et al disclose: "image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and

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binds a bundle of the sorted recording paper with a stapler into a book” (Col. 6, lines 18-34).

Tabata et al fail to teach: *determining whether the page....is a first page, inside right page, an inside left page, or a final page.* However, Takakura discloses: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and the graphical tiles describing a printed-visual appearance of a document taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18).

Claims 10-11 are directed towards a method for implementing the steps found in claims 8, and 8 respectively, and are similarly rejected.

Regarding claim 12, which depends on claim 1, Tabata et al disclose: “...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach: *user input is received from an electronic file.* Tabata et al fail to explicitly teach *the database includes an entry for each instruction.* However, Takakura teaches: “A display pattern called a “form” is added to these three input editing operations” (col. 4, lines 23-31, col. 5, lines 5-26, Fig. 6E-F, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the stapling/binding taught by Tabata et al, and the retrieval of a preformatted tile—“

forms”—determining the visual appearance of a document as if printed from a database, as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18) , and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 13, which depends on claim 1, Tabata et al disclose: “...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach: *The instruction identifies a printing media to be used*.... However, Miller et al disclose: “...the print media may comprise of any variety of sheet sizes.....” (Col. 3, lines 10-20). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that this would have allowed the operator to select from a wide variety of printing media.

Regarding claim 14, which depends on claim 13, Tabata et al disclose: “...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach: *the instruction identifies the weight, color, texture*..... However, Miller et al disclose: : “...the print media may comprise of any variety of sheet sizes.....” (Col. 3, lines 10-20). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that this would have allowed the operator to select from a wide variety of printing media.

Regarding claim 15, which depends on claim 13, Tabata et al disclose: “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach: *the instruction identifies a pre-existing image*..... However, Miller et al disclose: : “....the print media may comprise of any variety of sheet sizes.....” (Col. 3, lines 10-20). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that this would have allowed the operator to select from a wide variety of printing media.

Regarding claim 16, which depends on claim 1, Tabata et al disclose: “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach:*the instruction identifies a cover to be used*..... However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display of a visual representation—“forms”, and “print binding”—indicating the front cover of a

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document input into a computer as if printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18), and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 17, which depends on claim 1, Tabata et al disclose:*the instruction identifies a binding to be used*.....-- “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al teach in the previous quote, the selection from a menu of options to instruct the system to display of the appearance of a document as if it was printed, and bind it with a staple.

Regarding claim 18, which depends on claim 17, Tabata et al disclose: “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach:*the instruction identifies a veloTM, tape, spiral*....
..... However, it would have been obvious to a person of ordinary skill in the art at the time of the invention to had performed this step, because Tabata et al teach above, the sorting of the document in the order selected by the user and then binding the document.

Regarding claim 19, which depends on claim 1, Tabata et al disclose:*the instruction identifies a physical modification of a printing media*.-- “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al teach above, the sorting of the document in the order selected by the user and then binding the document-- *physical modification*.

Regarding claim 20, which depends on claim 19, Tabata et al disclose: "...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book....." (Col. 6, lines 18-34). Tabata et al fail to teach: *the instruction identifies a hole punching, folding or cutting of the printing media*. However, Miller et al disclose: "...signature set stitcher 10a, signature set folder 10b, and signature set trimmer 10c....." (Col. 3, lines 40-67). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that these devices enabled the system to produce a finished document.

Regarding claim 21, which depends on claim 1, Tabata et al disclose: *...the user input is received through an interactive user interface--* "...When the staple function is selected, the control section 2108 displays a staple position input screen....." (Col. 20, lines 57-65). Tabata et al teach in the previous quote, the selection from a menu of options-- *an interactive user interface--* to instruct the system to display of the appearance of a document as if it was printed, and bind it with a staple.

Regarding claim 22, which depends on claim 21, Tabata et al disclose: *...receiving the user input includes displaying a plurality of instruction identifiers.....--* "...When the staple function is selected, the control section 2108 displays a staple position input screen....." (Col. 20, lines 57-65). Tabata et al teach in the previous quote, the selection from a menu of options-- *instruction identifiers--* to instruct the system to display of the appearance of a document as if it was printed, and bind it with a staple.

Claim 23 is directed towards a method for displaying a finished hard copy document for implementing the steps found in claim1, and is similarly rejected.

Claim 24 is directed towards a computer-assisted method for creating a hard copy document for implementing the steps found in claim1, and is similarly rejected.

Regarding claim 25, which depends on claim 24, Tabata et al disclose: *...the document assembler prints the electronic document... ..*--“....When the staple function is selected, the control section 2108 displays a staple position input screen.....the user touches ‘Execute’ on the screen, the selected staple position is transferred to the control section.....” (Col. 20, lines 57-65, and Fig. 20A-20E). Tabata et al teach in the previous quote, the printing, and binding with a staple of a document.

Regarding claim 26, which depends on claim 24, Tabata et al disclose: “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65). Tabata et al fail to explicitly disclose: *creating a second electronic document which depicts the visual appearance of the hard copy document... ..* However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display of a

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visual representation—"forms", and "print binding"-- of a document input into a computer, as if printed as taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18), and "figure input editing ...can be easily performed by the screen control process" (col. 6, lines 8-11).

Claim 27 is directed towards a computer program for implementing the steps found in claim 1, and is similarly rejected.

Regarding claim 28, which depends on claim 5, Tabata et al disclose: "...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book....." (Col. 6, lines 18-34). Tabata et al fail to teach: *the computer receives user input that selects a plurality of instructions*. However, Takakura teaches: "the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)" (col. 10, lines 39-62, col. 5, lines 5-26, col. 4, lines 22-31, Fig. 6E-F, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the editing of a visual representation of a document input into a computer as if printed as taught by Takakura, because Takakura teaches "a format can be changed on a page unit ...by a single output instruction" (col. 2, lines 62-67, col. 3, lines 1-18), and "figure input editing ...can be easily performed by the screen control process" (col. 6, lines 8-11).

Claim 29 is directed towards a method for implementing the steps found in claim 8, and is similarly rejected.

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Regarding claim 30, which depends on claim 20, Tabata et al disclose: “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach:*the instruction identifies cutting of the printing media*. However, Miller et al disclose: “....signature set stitcher 10a, signature set folder 10b, and signature set trimmer 10c.....” (Col. 3, lines 40-67). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that these devices enabled the system to produce a finished document.

Regarding claim 31, which depends on claim 20, Tabata et al disclose: “....image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach:*the instruction identifies folding of the printing media*. However, Miller et al disclose: “....signature set stitcher 10a, signature set folder 10b, and signature set trimmer 10c.....” (Col. 3, lines 40-67). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the teachings of Tabata et al and Miller et al, because Miller et al teach above, that these devices enabled the system to produce a finished document.

Regarding claim 32, which depends on claim 5, Tabata et al disclose: ...*the instruction identifies the size of the tile*--“....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65, Fig. 20a), and --“....it is

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assumed herein that a sheet ...having size B4 is shown.....” (Col. 17, lines 44-67). Tabata et al teach in the previous quote, specifying the size of the paper used for printing a document.

Regarding claim 33, which depends on claim 5, Tabata et al disclose: *...the instruction identifies the position of the tile--*“....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65, Fig. 20a), and -“....it is assumed herein that a sheet ...having size B4 is shown.....” (Col. 17, lines 44-67). Tabata et al teach in the previous quote, specifying the position of the tile used for printing a document.

Regarding claim 34, which depends on claim 4, Tabata et al disclose: *.....extracting information from the first electronic document--* “....A first image....is formed as described abovewhich sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al teach in the previous quote, the extraction of image information to be printed.

Regarding claim 35, which depends on claim 5, Tabata et al disclose: *...adding a tile.....--* “....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65, Fig. 20a), and -“....it is assumed herein that a sheet ...having size B4 is shown.....” (Col. 17, lines 44-67). “A display pattern called a “form” is added to these three input editing operations” (col. 4, lines 23-31, col. 5, lines 5-26, Fig. 6E-F, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the stapling/binding taught by Tabata et al, and the addition of a preformatted tile—“ forms”—determining the visual appearance of a document as if printed from a database of forms, as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18) ,

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and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Claim 36 is directed towards a method for implementing the steps found in claim 8, and is similarly rejected.

Regarding claim 37, which depends on claim 5, Tabata et al disclose: *...the instruction identifies a binding option...--“....When the staple function is selected, the control section 2108 displays a staple position input screen.....”* (Col. 20, lines 57-65, Fig. 20a), and *--“....it is assumed herein that a sheet ...having size B4 is shown.....”* (Col. 17, lines 44-67). Tabata et al teach in the previous quote, specifying the position of a binding used for printing a document.

Claim 38 is directed towards a method of depicting a hard copy document for implementing the steps found in claim 1, and is similarly rejected.

Claim 39 is directed towards a method of depicting a hard copy document for implementing the steps found in claim 1, and is similarly rejected.

Claim 40 is directed towards a method of depicting a hard copy document for implementing the steps found in claim 1, and is similarly rejected.

Regarding claim 41, which depends on claim 8, Tabata et al disclose: “image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book” (Col. 6, lines 18-34, Fig. 13A). Tabata et al fail to teach: *an organizational layer, a background layer, a printed content layer, a virtual proof annotations layer, and a finishing options layer*. However, Takakura discloses: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second

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page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, and col. 6, lines 26-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to had combined the display of staple annotation—*virtual proof annotation*-- of Tabata et al and 83, 85 (Fig. 6F)--*organization information layer*, the form image—*background layer*, 82 (Fig. 6E)--*printed content layer*, 86 (Fig. 6F)—*finishing options layer* describing a printed-visual appearance of a document taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18).

Regarding claim 42, which depends on claim 1, Tabata et al disclose: “...image recording apparatus.....which sorts recording paper with image data recorded thereon with a sorter and binds a bundle of the sorted recording paper with a stapler into a book.....” (Col. 6, lines 18-34). Tabata et al fail to teach: *producing the determined visual appearance as output includes displaying the determined visual appearance on a computer monitor*. However, Takakura teaches: “FIG. 2A shows a whole document in which the first page is the front cover....The document becomes a double-spread document in which after both sides are printed, the second page is printed on the back side of the front cover and the fourth page is printed on the back side of the third page” (col. 5, lines 5-26, col. 4, lines 26-31, Fig. 6E-F, and col. 6, lines 26-57), and “the insertion of the irregular format is designated. (Thus, the print binding is executed on the basis of the different format from the second page)” (col. 10, lines 39-62). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the indication of stapling/binding taught by Tabata et al, and the display of a visual representation—“forms”, and “print binding”-- of a document input into a computer, as if

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printed as taught by Takakura, because Takakura teaches “a format can be changed on a page unit ...by a single output instruction” (col. 2, lines 62-67, col. 3, lines 1-18), and “figure input editing ...can be easily performed by the screen control process” (col. 6, lines 8-11).

Regarding claim 43, which depends on claim 1, Tabata et al disclose:*determining the visual appearance includes obscuring a portion of the output*--“....When the staple function is selected, the control section 2108 displays a staple position input screen.....” (Col. 20, lines 57-65, and Fig. 20A-20E). Tabata et al teach in the previous quote, the display of the obscured appearance of a document as if it was printed, and bound with a staple.

Claim 44 is directed towards a method for implementing the steps found in claim 1, and is similarly rejected.

Regarding claim 45, which depends on claim 1, Tabata et al disclose:*determining the visual appearance includes providing a visual indication of the thickness*--“....automatic change mode shown in Fig. 13 (b), a binding space width of recording paper becomes gradually larger.....” (Col. 21, lines 40-67). Tabata et al teach in the previous quote, the display of a binding width of the appearance of a document before it was printed, and bound with a staple.

Claim 46 is directed towards a method of depicting a hard copy document for implementing the steps found in claim 1, and is similarly rejected.

Claim 47 is directed towards a method for implementing the steps found in claim 2, and is similarly rejected.

Response to Arguments

7. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

The Applicants indicate that: "Examiner did not come forward with any evidence contrary to Applicants' explanation of Tabata" (p. 2, lines 9-12). The Examiner has addressed the Applicants' arguments concerning the determination in the computer of a visual appearance to the document in the rejections above. The Applicants are referred to these rejections included above.

8. Applicant's arguments filed 12/28/2000 have been fully considered but they are not persuasive.

Moreover, the Applicants submit that: "what is printed in Tabata does not contain any visual indicia of the assembly process" (p. 2, lines 19-22). The Examiner disagrees with this assessment of Tabata, because Tabata in **Fig. 13A, col. 20, lines 57-65**, Tabata shows 6 different **visual displays of an as-if-printed document for instructing the copier with an indication of showing the position for a staple on the printed/assembled document is to be placed.**

In addition, the Applicants indicate that: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "Tabata does not teach displaying the scanned image on the LCD display screen" p. 2, line 27) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

I. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cesar B. Paula whose telephone number is (703) 306-5543. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (703) 308-5186. However, in such a case, please allow at least one business day.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this Action should be mailed to:

Director United States Patent and Trademark Office
Washington, D.C. 20231

Or faxed to:

- (703) 308-9051, (for formal communications intended for entry)


Or:

- (703) 308-5403, (for informal or draft communications for discussion only, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

CBP

03/26/01


HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100